# EXERCISING DEVICE THAT CAN BE SWIVELED

## BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to an exercising device, and more particularly to an exercising device that can be swiveled horizontally and pivoted vertically simultaneously.

2. Description of the Related Art

A conventional exercising device can provide a body exercising effect. For example, the swivel device can be swiveled leftward and rightward, and the pivot device can be pivoted upward and downward. In addition, the user can practice the skill of upside down by an upside-down device. However, the conventional exercising device can only provide a single body exercising effect, thereby limiting the versatility of the conventional exercising device.

## SUMMARY OF THE INVENTION

The primary objective of the present invention is to provide an exercising device that can be swiveled leftward and rightward.

Another objective of the present invention is to provide an exercising device that can be pivoted upward and downward.

A further objective of the present invention is to provide an exercising device, wherein the user can practice the skill of upside down.

A further objective of the present invention is to provide an exercising device, wherein the user can exercise his feet, back and waist.

In accordance with the present invention, there is provided an exercising device, comprising a support frame, a pivot unit, a footrest, wherein:

the support frame includes a front stand, a rear stand pivotally connected with the front stand, and a pivot shaft pivotally mounted between the front stand and the rear stand;

the pivot unit is pivotally mounted on the support frame and includes an operation lever pivotally mounted on the pivot shaft of the support frame, and a threaded swivel shaft rotatably mounted on the operation lever; and

the footrest is mounted on the pivot unit and includes a fixed section having a first end secured on an upper end of the swivel shaft of the pivot unit to rotate therewith, and a movable section having a first end movably mounted in the fixed section and a second end protruded outward from a second end of the fixed section.

Further benefits and advantages of the present invention will become apparent after a careful reading of the detailed description with appropriate reference to the accompanying drawings.

## BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a perspective view of an exercising device in accordance with the preferred embodiment of the present invention;

Fig. 2 is an exploded perspective view of the exercising device as shown in Fig. 1;

Fig. 3 is a partially enlarged exploded perspective view of the exercising device as shown in Fig. 1;

Fig. 4 is a partially cut-away side plan cross-sectional view of the exercising device as shown in Fig. 1;

Fig. 5 is a partially enlarged view of the exercising device as shown in Fig. 4;

Fig. 6 is a partially cut-away top plan view of the exercising device as shown in Fig. 1;

Fig. 7 is a schematic operational view of the exercising device as shown in Fig. 6 in use;

Fig. 8 is a schematic side plan operational view of the exercising device as shown in Fig. 1 in use; and

Fig. 9 is a schematic side plan operational view of the exercising device as shown in Fig. 1 in use.

## DETAILED DESCRIPTION OF THE INVENTION

Referring to the drawings and initially to Figs. 1-5, an exercising device 1 in accordance with the preferred embodiment of the present invention comprises a support frame 11, a pivot unit 12, a footrest 13, a backrest bar 14, and two armrests 15.

The support frame 11 is substantially inverted V-shaped, and includes a front stand 111, a rear stand 112 pivotally connected with the front stand 111, and a pivot shaft 113 pivotally mounted between the front stand 111

and the rear stand 112. The front stand 111 of the support frame 11 is substantially U-shaped, and has an upper end provided with a tube 114 having a mediate portion formed with an opening 115. The rear stand 112 of the support frame 11 is substantially U-shaped, and has an upper end provided with two opposite mounting tubes 116 each mounted on the tube 114 of the front stand 111 and provided with a crossbar 117 located below the two mounting tubes 116. The crossbar 117 has a mediate portion provided with a stop block 119. The rear stand 112 of the support frame 11 is provided with two opposite mounting sleeves 118. The pivot shaft 113 of the support frame 11 is extended through the two mounting tubes 116 of the rear stand 112 and the tube 114 of the front stand 111.

The pivot unit 12 is pivotally mounted on the support frame 11, and includes an operation lever 121 pivotally mounted on the pivot shaft 113 of the support frame 11, and a threaded swivel shaft 124 rotatably mounted on the operation lever 121. The operation lever 121 of the pivot unit 12 is located in the opening 115 of the tube 114 of the front stand 111 and is formed with a transverse hole 121b for passage of the pivot shaft 113 of the support frame 11. The operation lever 121 of the pivot unit 12 has a mediate portion formed with a shaft hole 121a for passage of the swivel shaft 124.

The footrest 13 is mounted on the pivot unit 12 and includes a fixed section 131 having a first end secured on an upper end of the swivel shaft 124 of the pivot unit 12 to rotate therewith, and a movable section 132 having a first

end movably mounted in the fixed section 131 and a second end protruded outward from a second end of the fixed section 131. The footrest 13 further includes a seat plate 134 secured on the first end of the fixed section 131. The footrest 13 further includes an arc-shaped connecting seat 138 secured on the second end of the movable section 132, and a footrest seat 133 secured on the connecting seat 138 by a plurality of screw members 139. The second end of the fixed section 131 of the footrest 13 has a top formed with a positioning hole 135, the movable section 132 of the footrest 13 has a top formed with a plurality of threaded adjusting holes 137, and the footrest 13 further includes a threaded adjusting member 136 extended through the positioning hole 135 of the fixed section 131 and screwed into a respective one of the adjusting holes 137 of the movable section 132.

The pivot unit 12 further includes an upper bearing 122 mounted on the swivel shaft 124 and located between the fixed section 131 of the footrest 13 and the operation lever 121 of the pivot unit 12, a nut 125 screwed on a lower end of the swivel shaft 124, and a lower bearing 123 mounted on the swivel shaft 124 and located between the operation lever 121 of the pivot unit 12 and the nut 125.

Each of the upper bearing 122 and the lower bearing 123 includes a mounting ring d, a fixing race f secured on the mounting ring d, and a ball ring e mounted between the mounting ring d and the fixing race f.

The operation lever 121 of the pivot unit 12 has a first end formed with a through hole 121c, the first end of the fixed section 131 has a bottom formed with a threaded locking hole 1310, and the pivot unit 12 further includes a threaded fixing member 126 extended through the through hole 121c of the operation lever 121 and screwed into the locking hole 1310 of the fixed section 131, so that the fixed section 131 of the footrest 13 is fixed on the operation lever 121 of the pivot unit 12. The operation lever 121 of the pivot unit 12 has a second end that can be pivoted to abut the stop block 119 of the support frame 11.

The backrest bar 14 is substantially L-shaped, and has a horizontal section secured on the fixed section 131 of the footrest 13 by a fixing member 142 and a vertical section provided with a backrest 141.

Each of the two armrests 15 is mounted on the rear stand 112 of the support frame 11 and has a lower end inserted into a respective one of the two mounting sleeves 118.

In operation, referring to Figs. 6 and 7 with reference to Figs. 1-5, the fixing member 126 of the pivot unit 12 is unscrewed from the locking hole 1310 of the fixed section 131, so that the fixed section 131 of the footrest 13 is released from the operation lever 121 of the pivot unit 12. Then, the swivel shaft 124 can be rotated on the operation lever 121 of the pivot unit 12, so that the fixed section 131 and the seat plate 134 of the footrest 13 can be swiveled

on the operation lever 121 of the pivot unit 12 the swivel shaft 124, thereby achieving the effect of exercising the user's feet and waist.

Referring to Fig. 8 with reference to Figs. 1-5, the fixing member 126 of the pivot unit 12 is screwed into the locking hole 1310 of the fixed section 131, so that the fixed section 131 of the footrest 13 is fixed on and combined with the operation lever 121 of the pivot unit 12. Thus, the fixed section 131 and the seat plate 134 of the footrest 13 and the operation lever 121 of the pivot unit 12 can be pivoted about the pivot shaft 113 of the support frame 11, thereby achieving the effect of exercising the user's feet, back and waist.

Referring to Fig. 9 with reference to Figs. 1-5, the backrest bar 14 is removed from the fixed section 131 of the footrest 13. Then, the fixed section 131 and the seat plate 134 of the footrest 13 and the operation lever 121 of the pivot unit 12 can be pivoted about the pivot shaft 113 of the support frame 11 until the second end of the operation lever 121 of the pivot unit 12 is rested on the stop block 119 of the support frame 11, so that the footrest seat 133 of the footrest 13 is located higher than the pivot shaft 113 of the support frame 11, thereby facilitating the user practicing the skill of upside down.

Although the invention has been explained in relation to its preferred embodiment(s) as mentioned above, it is to be understood that many other possible modifications and variations can be made without departing from the scope of the present invention. It is, therefore, contemplated that the appended

claim or claims will cover such modifications and variations that fall within the true scope of the invention.